



Virtual Fixturing

This is a device or tool used for locating and holding a part to be Manufactured or Inspected . Based on the fact that all objects are 3 Dimensional . To Manufacture or Inspect the part properly you need to control the 3 sides of the part .

Common Industry Practice such as Aerospace And Commercial Manufacturers call them Tooling Points , or Datum Target Points . Commonly 3 points on a plane (Primary) , 2 points on a plane (Secondary) , and 1 point (Tirciary) .

Virtual Fixturing is a device with multiple points, having infinite location ability to accommodate different size , shape , and form . While having quick , precise , and repeatable set-ups with out adding or removing anything to fixture .

This is achieved by making these points Virtually float . Using a tooling point (ball) attached to 3 threaded rods achieves fluid movement in 3 planar directions . Also give that same point (ball) 3 points of rotation , that makes that point (ball) the ability to locate Virtually any where on any given plane .

Virtual Fixture is a device with 6 or more points attached to rotating cylinders , mounted on rotating bases which is then mounted on a base plate to give the user infinite location to accommodate any size , shape , or form .



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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/781,436	07/10/2004	Scott Mullen	

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CONFIRMATION NO. 3445
FORMALITIES LETTER



OC000000013722380

Date Mailed: 09/03/2004

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to this application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement claim(s) commencing on a separate sheet in compliance with 37 CFR 1.75(h) and 1.121 is required.

The applicant needs to satisfy supplemental fees problems indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Additional claim fees of \$43 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$43 for a Small Entity

- Total additional claim fee(s) for this application is \$43
 - \$43 for 1 independent claims over 3.

Replies should be mailed to: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

11/02/2004 MGE BREM1 00000128 10781436

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43.00 OP

A copy of this notice MUST be returned with the reply.

A handwritten signature in black ink, appearing to read "Al Pegfange", is written over a horizontal line.

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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE